

WHAT IS CLAIMED IS:

1. An improvement on a bi-directional lock, comprising
 - an inner locking element securely joined to an inner side of a door;
 - 5 an outer locking element securely joined to an outer side of the door;
 - and
 - an engaging element secured to a first edge of the door, and associated with the locking elements so that a dead bolt thereof is movable between a locking position projecting from the first edge of the door and an unlocking position retreating into the first edge by means of
 - 10 operating the locking elements with a key;
 - the outer locking element having a plurality of hollow posts formed with screw threads on inner sides; the hollow posts being inserted in respective ones of first holes extending from the outer side to the
 - 15 inner side of the door;
 - the inner locking element having a fixing base having hollow posts formed with screw threads on inner sides; the hollow posts of the fixing base being inserted in respective ones of the first holes of the door; the fixing base and the outer locking element being secured to
 - 20 respective sides of the door by means of screwing first screws into the threaded hollow posts of the fixing base of the inner locking element, and the threaded hollow posts of the outer locking element;
 - the inner locking element having a lock base disposed over the fixing

base thereof; the lock base having a plurality of fixing posts projecting into respective ones of second through holes of the door; each of the fixing posts having a screw hole at a tail end thereof; the door having third through holes extending inside from the first edge thereof to communicate with the second through holes of the door; the fixing base of the inner locking element having locating posts, which project into the second through holes of the door, and each of which has a gap at a tail end thereof; the lock base of the inner locking element being secured to the door by means of screwing second screws into the third through holes of the door, and the screw holes of the fixing posts of the lock base; the second screws being passed through the gaps of the locating posts, and contacting the locating posts to be supported by the locating posts.

2. The bi-directional lock as claimed in claim 1, wherein each of the gaps of the locating posts is formed with a laid-down U-shape.